Redesigning the Preparation of Science and Math Teacher Candidates to Promote Adolescent Reading Comprehension

Carnegie Corporation of New York, Adolescent Literacy Preservice Initiative: Reading Texts to Learn Content

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Purpose: The focus of this project will be the redesign of math and science teacher preparation to emphasize and integrate literacy strategies. The project will include four strategic objectives: (1) to redesign the preparation of math and science teachers to include a strong emphasis on incorporating literacy strategies to learn content; (2) to increase the rigor of the teacher as researcher component of the teacher preparation program in order to prepare a cadre of new teacher researchers, (3) to develop a network that connects teacher candidates with inservice content area teachers who are committed to improving adolescent literacy, and (4) to involve interested stakeholders, such as the Graduate School of Education, the College of Liberal Arts and Science, the Oregon Department of Education, and Portland Public Schools in the preparation of math and science teachers.

Method: The project will (a) convene a collaborative design team of curriculum and instruction faculty, arts and science faculty, scientists, mathematicians, and cooperating teachers from Portland Public Schools to develop innovative instructional materials; (b) organize an advisory council of interested stakeholders to provide input into the preparation of math and science teachers; (c) to develop innovative instructional materials (i.e., exemplary math and/or science lessons) to share with teacher candidates; (d) to revise the syllabi in the Graduate Teacher Education Program (GTEP) for the following courses: content area literacy, science and math methods, and advanced science and math methods; (e) to develop a cadre of adolescent literacy researchers by redesigning the existing Teacher as Researcher course, strengthening the data collection, and analysis components, and embedding the course work in clinical practice; (f) to develop an advanced content area literacy course for teacher candidates and inservice teachers; (g) to develop a content area teacher network consisting of university faculty, teacher candidates, and inservice teachers who are committed to adolescent literacy; and (h) to develop a website, Content Area Teachers Network, that includes innovative instructional materials, revised syllabi,
and teacher candidate research papers. Information about the project will be disseminated at national and regional conferences, as well as in manuscripts for publication.